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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/196,338	11/19/1998	SEAN HANDEL	AC980010	9014

29838 7590 03/03/2005

OPPENHEIMER WOLFF & DONNELLY, LLP (ACCENTURE)
PLAZA VII, SUITE 3300
45 SOUTH SEVENTH STREET
MINNEAPOLIS, MN 55402-1609

EXAMINER	
DURAN, ARTHUR D	

ART UNIT	PAPER NUMBER
3622	

DATE MAILED: 03/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/196,338	HANDEL ET AL.	
	Examiner	Art Unit	
	Arthur Duran	3622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 February 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,10,11 and 25-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 10, 11, 25-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☒ Interview Summary (PTO-413) Paper No(s)/Mail Date. *2/23/05*.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1, 10, 11, 25-29 have been examined.

Response to Amendment

2. The Amendment filed on 2/10/05 is insufficient to overcome the Bergh and Sumita reference.

Continued Examination Under 37 CFR 1.114

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/10/05 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1, 10, 11, 25-29 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, 10, 11, 25-29 rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01.

On February 23, 2005, a phone interview was conducted with Rudolph Donnelly to discuss independent claim 1 from the claim set dated 1/10/05. Examiner stated that independent claim 1 appeared to state unclear steps. Examiner demonstrated the seemingly unclear logic of claim 1 in steps (e), (f), (g). The manipulation and relation between the predetermined number of user profiles and predetermined conformity requirement during the repeating of the filtering and determining steps is unclear. Each of the independent claims also includes the series of steps as stated in claim 1 steps (e), (f), and (g).

During discussion, Rudolph Hoffman agreed that the claim 1 steps (e), (f), and (g) were unclear and that an amendment of those claim steps and features would be necessary.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1, 10, 11, 25-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergh (6,112,186) in view of Sumita (5,907,836).

Bergh teaches a method and corresponding apparatus for reporting rating information comprising: providing a database of user profiles (see at least col.3, lines 25-65); wherein a first subset of users have each submitted product/service rating data stored in the user profile (see at least col. 3, lines 45-67, col. 4, lines 15-20); receiving a request for rating information (see at least col. 6, lines 30-45, col. 14, lines 1-65, col. 33, lines 65-67); identifying a first set of user profiles of users from the first subset of users which have previously submitted rating data for the desired product/service (col. 6, lines 30-40, 50-60, col. 8, lines 20-30, col. 10, lines 10-15, col. 12, lines 20-25); mapping the personal information data in the first set of profiles along multiple dimensions to the requesting user profile (col. 8, line 40 – col. 9, line 67, col. 19, lines 40-67); filtering the first set of profiles to create a second set of a predetermined number of profiles which most closely map to the requesting user profile (col. 10, lines 35-45); determining whether the second set of profiles is sufficiently similar to the user profile to satisfy predetermined conformity requirements (col. 10, lines 45 – col. 11, line 65) . Bergh also teaches repeating filtering and determining if the second set of user profiles are not determined to be sufficiently similar, creating a set of rating information and reporting the rating information (col. 10, lines 40-50, col. 11, lines 5-15, col. 16, lines 25-60).

Sumita teaches repeating the filtering and determining steps when the results are not sufficiently similar (col. 56, lines 1-10, 50-55).

It would have been obvious to have repeated the filtering and determining steps in Bergh as in Sumita in order to generate enough ratings for the predetermined number of rating results of Bergh.

Additionally, Bergh also teaches recommending items to user upon request,

"The user 44 can request the system to make artist recommendations at any time, and the system allows the user 44 to tailor their request based on a number of different factors" (col 27, lines 17-20).

Also, Bergh discloses that, "the profiles collected in those steps are not used to create and report a set of rating information to the requesting user about the product or service of interest as claimed". Bergh discloses that, "By way of example, a new user 44 accesses the system via the World Wide Web. The system displays a welcome page, which allows the user 44 to create an alias to use when accessing the system" (col 26, lines 55-62), and,

"If the alias supplied by the user is not already in use, then the node verifies whatever demographic data the user supplied (step 708). In embodiments where the user is not prompted to supply any demographic data, this step may skipped" (col 11, lines 5-15), and,

"The user 44 can request the system to make artist recommendations at any time, and the system allows the user 44 to tailor their request based on a number of different factors" (col 27, lines 17-20).

Therefore, Bergh discloses that a user can be a new user, that the user demographic data may or may not be requested, and that the user can request artist recommendations at any time. Since Bergh's user can request artist recommendations at any time, Bergh's user can request item recommendations before or regardless of if the user has provided demographic information or item rating information.

Also, Bergh discloses that item rating information can be retrieved,

"Profiles for each item that has been rated by at least one user may also be stored in memory. Each item profile records how particular users have rated this particular item" (col 5, lines 1-3).

Also, Bergh discloses 1) identifying a first set of users who *previously* rated a product/service,

"Profiles for each item that has been rated by at least one user may also be stored in memory. Each item profile records how particular users have rated this particular item. Any data construct that associates ratings (10) given to the item with the user assigning the rating can be used. It is preferred is to provide item profiles as a sparse vector of n-tuples. Each n-tuple contains at least an identifier representing a particular user and an identifier representing the rating that user gave to the item, and it may contain other information, as described above in connection wit h user profiles. As with user profiles, item profiles may also be stored as an array of pointers. Item profiles may be created when the first rating is given to an item or when the item is first entered into the system. Alternatively, item profiles may be generated from the user profiles stored in memory, by determining, for each user, if that user has rated the item and, if so, storing the rating and user information in the item's profile. . .For example, referring to FIG. 2, item profiled at a and user profile data may be stored as a matrix of values which provides user profile data when read "across," i.e. when rows of the matrix are accessed, and provides item profile data when read "down," i.e. when columns of the matrix are accessed. A data construct of this sort could be provided by storing a set of user n-tuples and a set of item niuples. In order to read a row of the matrix a specific user n-tuple is accessed and in order to read a column of the matrix a specific item n-tuple is selected" (col 5, lines 1-30).

Further, note from this passage, "Alternatively, item profiles may be generated from the user profiles stored in memory, by determining, for each user, if that user has rated the item and, if so, storing the rating and user information in the item's profile" (col 5, lines 13-17) and also from Figure 2 (Fig. 2), that each item profile contains a set of user profiles who have rated that item.

Also, Bergh discloses 2) filtering that first set of user profiles to create a second set of user profiles,

"The data object includes an interface for searching the physical memory. The interface accepts one or more criterion for screening data retrieved from the underlying physical memory. For example, the system may instruct the data object to retrieve all profiles having ratings for a particular item in excess of '5'" (col 6, lines 33-39).

Hence, Bergh discloses that users rate products or services, that there is as set of users consisting of the set of users who have rated a certain product, and that this set of users who has rated a certain product can be further filtered by taking only the users with a product ranking greater than a certain rank.

Also, Bergh also discloses that a predetermined number of users in a set can be returned based upon different criteria,

"The threshold value, L, can be set to any value which improves the predictive capability of the method. In general, the value of L will change depending on the method used to calculate the similarity factors, the item domain, and the size of the number of ratings that have been entered. In another embodiment, a predetermined number of users are selected from the users having a similarity factor better than L, e.g. the top twenty-five users" (col 10, lines 34-43).

Additionally, Bergh discloses product statistics along several dimensions (Fig. 2; col 6, lines 33-60). Note that records of who profiles an item are kept and also of the different characteristics (age, demographics, other items the user(s) rated) of the users who profile the items. Also, note that the relation between the user and user characteristics and the other user(s) and user characteristics and items available can be analyzed and searched in a variety of manners and with a variety of criteria.

Bergh discloses that rating information is returned from the second set of user profiles (col 10, lines 25-61).

Bergh discloses "product/service information from a content database including at least information about pricing from a variety of suppliers rated by the second set of user profiles" (col 27, line 65-col 28, line 2; col 27, lines 6-13). Note that product information includes location of items in a retail establishment and that being able to purchase an item implies providing pricing information and that providing the category that an item belongs in or its performer, in the case of music, is also providing product information.

Bergh discloses multiple suppliers (col 28, lines 3-40). Note that since there are multiple retail establishments, different music from different genres, different websites, etc, that Bergh implies that there can be different stores, producers, content suppliers.

Sumita discsloses attainging and developing user profiles (Fig. 2; Fig. 4) and that user profiles can be compared with items (Fig. 12) and that user profiles and preferences can be compared (Fig. 40).

Sumita discloses multiple suppliers (col 18, lines 64-68).

Sumita discloses filtering steps to attain a level of accuracy in the similarity set and/or a predetermined number of items in the similar set (col 4, lines 40-55; col 5, line 63-col 6, line 5). Note that Sumita utilizes and manipulates both a predetermined number in the return set and predetermined conformity requirement.

Sumita further discloses automatically repeating filtering steps to attain a level of accuracy in the similarity set (col 68, line 6-21; col. 56, lines 1-10, 50-55; col 28, lines 44-67).

The following is in regards to claims 25-29.

Additionally, Bergh discloses mapping of the personal information data based on pattern matching (col 6, line 33-col 7, line 7; col 4, lines 51-55; col 12, lines 15-31).

Bergh discloses that the user can have multiple profiles and that these profiles can be based on different domains or intentions of the user (col 3, lines 25-40) and also different interfaces dependent upon domains (col 28, lines 4-17).

Response to Arguments

6. Applicant's arguments with respect to claims 1, 10, 11 have been considered but are not found persuasive. New claims 25-29 are rejected above.

Examiner further notes that it is the Applicant's claims as stated in the Applicant's claims that are being rejected with the prior art.

Examiner notes a 35 USC 103(a) rejection was made and that while specific references were made to the prior art, it is actually also the prior art in its entirety and the combination of the prior art in its entirety that is being referred to.

Examiner notes that because Bergh discloses one set of features that does not exclude Bergh from disclosing a different set of features in another part of Bergh's diclosure.

Examiner notes that when Bergh discloses a set of features that includes features A and/or B, that features A, B, A and B are also disclosed.

On page 7 of Applicant's Amendment dated 2/10/05, Applicant states that the claims were amended to say, ". . . generated such that accurate product statistics are obtained along several". However, the claims state, "generated such that product statistics are obtained along several...".

Examiner notes that the word 'accurate' does not occur in the claims.

Please note that the additional citations added below have also been added to the rejection above.

Bergh discloses product statistics along several dimensions (Fig. 2; col 6, lines 33-60). Note that records of who profiles an item are kept and also of the different characteristics (age, demographics, other items the user(s) rated) of the users who profile the items. Also, note that the relation between the user and user characteristics and the other user(s) and user characteristics and items available can be analyzed and searched in a variety of manners and with a variety of criteria.

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Sumita further discloses automatically repeating filtering steps to attain a level of accuracy in the similarity set (col 68, line 6-21; col. 56, lines 1-10, 50-55; col 28, lines 44-67).

Conclusion

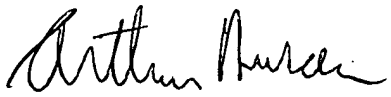
The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

a) Bieganski (6,321,221) discloses associating user profiles and item recommendations.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arthur Duran whose telephone number is (571) 272-6718. The examiner can normally be reached on Mon- Fri, 8:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Stamber can be reached on (571) 272-6724. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Arthur Duran
Patent Examiner
2/25/05